

## REMARKS

In accordance with the foregoing, claims 1, 6, 11, 16, and 17 are amended. No new matter is presented in any of the foregoing and, accordingly, approval and entry of the amended claims are respectfully requested.

Claims 1-18 are pending and under consideration.

### Item 3: Objection to Claim 13

In item 3 of the Office Action, the Examiner objects to claim 17 because of informalities. Claim 17 is amended herein to correct the informality. Withdrawal of the objection is requested.

### Item 4: Rejection of claims 1-18 under 35 U.S.C. §101

In item 4, of the Office Action, the Examiner rejects claims 1-18 under 35 U.S.C. 101 contending the claimed invention is directed to non-statutory subject matter since the current claim language does not clearly claim a tangible result.

Independent claims 1, 6, 11, 16, and 17 are amended herein to address the Examiner's concern. Independent claim 1, as amended, as an example recites a "noise countermeasure determination method by a computer for determining a noise countermeasure with respect to an analyzing circuit that is to be analyzed for a user of the circuit, comprising: obtaining an analyzing circuit judgement by the computer (and) . . . outputting an improvement proposal from the computer to the user for making the analyzing circuit closer." Independent claims 6, 11, 16, and 17 as amended have similar recitations

Applicants also respectfully point out to the Examiner that as set forth in the USPTO Interim Guidelines for Subject Matter Eligibility recited features such as:

calculating a price of an item to sell and then conveying the calculated price to a potential customer would be a tangible result.

(See, USPTO Overview of Interim Guidelines for Subject Matter Eligibility at <<[http://www.uspto.gov/web/offices/pac/compexam/interim\\_guide\\_subj\\_matter\\_eligibility.html](http://www.uspto.gov/web/offices/pac/compexam/interim_guide_subj_matter_eligibility.html)>>).

Applicants submit that claims 1-18 comply with 35 U.S.C §101 and request the rejection be withdrawn.

### Items 5-6: Rejection of claims 1-18 under 35 U.S.C. §103(a)

In items 5 and 6 of the Office Action, the Examiner rejects claims 1-18 under 35 U.S.C. §103(a) as being unpatentable over art Chang (U.S.P. 5,546,321) in view of combinations of "Performance Driven Global Routing And Wiring Rule Generation For High Speed PCBs and MCMs" by Mehrotra, Frazon, and Steer; and Chain (U.S.P. 5,682,336).

The Examiner asserts that Chang teaches all the features of the independent claim 1, with the exception of "a plurality of transmission circuit topologies into which the analyzing circuit is categorized depending on manners in which the wirings are connected." (Action at page 5).

However, the Examiner asserts that such topologies are taught in Mehrotra citing Fig. 1 and Introduction and it would have been obvious to modify Chang in view of Mehrotra to "allow design of complex circuit topologies." (Action at page 5). Independent claims 6, 11, 16 and 17 are rejected for similar reasons.

The rejections are traversed. Applicants submit that features recited by each of the independent claims are not taught by the cited art, alone or in combination.

Independent claim 1, as amended, recites a noise countermeasure determination method including "obtaining an analyzing circuit judgement by the computer result by judging acceptability of the analyzing circuit based on a comparison of features of the analyzing circuit and a plurality of transmission circuit topologies into which the analyzing circuit is categorizable depending on manners in which wirings are connected, wherein a transmission waveform of the analyzing circuit differs depending on each of the transmission circuit topologies; and outputting an improvement proposal from the computer to the user for making the analyzing circuit closer to one of basic types of the transmission circuit topologies depending on the analyzing circuit judgement result."

Independent claims 6, 11, 16 and 17, all as amended, have similar recitations.

Applicants submit that Chang also does not teach "judging acceptability of the analyzing circuit based on a comparison of features of the analyzing circuit and a plurality of transmission circuit topologies (emphasis added)," as the Examiner contends.

Further, Applicants submit that Chang does not teach "outputting an improvement proposal from the computer to the user for making the analyzing circuit closer to one of basic types of the transmission circuit topologies depending on the analyzing circuit judgement result (emphasis added)," as the Examiner contends.

Rather, Chang merely teaches a design method in which a knowledge base means (or an expert system) outputs a solution based on parameter or performance conditions which are input by a user and are related to a multi-layer printed circuit board.

Mehrotra merely teaches a method of transforming timing and noise constraints into physical constraints (or wiring rules). The wiring rule is determined by global routing using a net topology model that is used for evaluating the performance.

Even assuming *arguendo* the Examiners assertions on Chang's teaching are correct, an *arguendo* combination of Chang and Mehrota does not teach all recited features of the present invention.

First, Chang does not teach or suggest "transmission circuit topologies."

For this reason, even an *arguendo* modification of Chang so a net topology taught by Mehrotra is used as the parameter that is input to the expert system of Chang, does not teach how the net topology should be used for "outputting an improvement proposal," as recited by independent claims of the present invention. Therefore, "judging acceptability of the analyzing circuit based on a comparison of features of the analyzing circuit and a plurality of transmission circuit topologies," as recited by claims of the present invention is not taught by combination of Chang and Mehrotra.

In addition, Chang does not teach a computer "outputting an improvement proposal from the computer to the user for making the analyzing circuit closer to one of basic types of the transmission circuit topologies depending on the analyzing circuit judgement result."

The Examiner cites Chang col. 8 lines 60-67 as teaching this feature. (Action at page 6).

However, Chang, instead, merely discusses that a design engineer can evaluate the output and observe a change in the output depending on the parameter.

That is, Chang does not teach a computer making an evaluation and outputting the improvement proposal for making the analyzing circuit closer to one of the basic types of the transmission circuit topologies depending on the analyzing circuit judgement result. According to the present invention, it is not the design engineer (or user) that makes the evaluation.

Moreover, Mehrotra does not teach outputting such an improvement proposal for making the analyzing circuit closer to one of the basic types of the transmission circuit topologies.

Therefore, such an "outputting an improvement proposal from the computer to the user for making the analyzing circuit closer to one of basic types of the transmission circuit topologies depending on the analyzing circuit judgement result" is not obvious in view of Chang and Mehrotra.

For the foregoing reasons, it is believed that independent claim 1, 6, 10, 11, 16-17 (and respective dependent claims) are allowable over Chang in view of Mehrotra.

The Examiner relies on Chian to support the rejection of dependent claims 2-4, 7-9 and 12-14. Applicants submit that dependent claims are patentable since patentability resides in

parent independent claims 1, 6, and 11. Chain does not teach any outputting by a computer of an improvement proposal.

**Summary**

Since features recited by claims 1-18 are not taught by the cited art, alone or in combination, and *prima facie* obviousness has not been established, the rejections should be withdrawn and claims 1-18 allowed.

**CONCLUSION**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: September 5, 2006

By: Paul W. Bobowiec  
Paul W. Bobowiec  
Registration No. 47,431

1201 New York Avenue, NW, 7th Floor  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501